AMENDMENTS TO THE DRAWINGS

Please replace the drawings presently on file for Figures 1-3 and 10A-10C with the attached replacement drawings.

Figures 1-3 and 10A-10C have been designated by the legend – PRIOR ART – as suggested by the Examiner in the Official Action dated October 11, 2007.

REMARKS

Favorable reconsideration is respectively requested.

The claims are 1-18.

Replacement drawings have been filed responsive to Official Action paragraph 1.

With regard to the above amendment to the claims, the recitation of "an unbaked dielectric layer" in the current claims 1, 3 and 8 to 10 has been changed to "a non-photosensitive unbaked dielectric layer" based on the description of page 4, lines 4 to 6, and the prepared glass paste composition of page 39, lines 11 to 15 of the specification.

The significance of this amendment will become further apparent from the remarks below.

Claims 1, 2, 5, 6, 7, 14 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshio et al. (US 2002/0163108) in view of Iwasaki (US 2003/0087179 A1).

Claims 3, 13, 16, 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Obiya et al. (US 5,919,569) in view of Oshio et al. (US 2002/0163108), further in view of Iwasaki (US 2002/0087179 A1).

Claims 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshio et al. (US 2002/0163108) in view of Iwasaki (US 2003/0087179 A1).

Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshio et al. (US 2002/0163108) in view of Iwasaki (US 2003/0087179 A1), and further in view of Obiya et al. (US 5,919,569).

Claim 10 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshio et al. (US 2002/0163108) in view of Iwasaki (US 2003/0087179 A1), and further in view of Hibino et al. (US 2003/0071572 A1).

Claims 11 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshio et al. (US 2002/0163108) in view of Iwasaki (US 2003/0087179 A1), and further in view of Obiya et al. (US 5,919,569).

These rejections are respectively traversed.

Claim 1

Above-amended claim 1 differs from Oshio et al. (US 2002/0163108) in that Oshio et al. fail to teach or disclose the following two features:

a) a burnable intermediate layer formed on a removable support film and the intermediate layer is water-soluble or water-swellable; and

b) a non-photosensitive unbaked dielectric layer.

Concerning the burnable intermediate layer (above features a) of amended claim 1, the material thereof appears to be similar to that of Iwasaki (US 2003/0087179).

However, the purpose of the intermediate layer of Iwasaki is to improve adhesion between a removable film support and another layer.

Accordingly, it is apparent that if the intermediate layer of Iwasaki were applied to the invention of amended claim 1 as the burnable intermediate layer (above feature a), it would not be possible to only remove the removable support film since, due to considerable adhesive forces, a large portion of the non-photosensitive unbaked dielectric layer (above feature b) would be undesirably removed from the unbaked laminate during removal of the removable support film.

Therefore, one of ordinary skill in the art would not provide such a layer which would serve to improve adhesion in the present invention, even if referring to Oshio et al. and Iwasaki.

In view of the above, amended claim 1 is not obvious to one of ordinary skill in the art based on the teachings of Oshio et al. and Iwasaki.

Claim 2

Concerning the rejection of present claim 2, it is not reasonable to employ the intermediate layer of Iwasaki for the layer (14) of Fig. 4B of the present drawings for the following reasons.

Reason 1: similar to the reason described above, if the intermediate layer of Iwasaki were applied to the invention of present claim 2 as the burnable intermediate layer (14 of Fig. 4B), it would not be possible to only remove the removable support film (18(182)).

Reason 2: if the layer 18(182) of Fig. 4B were not arranged to solve the problems mentioned in Reason 1, the adhesive capability of the intermediate layer would degrade due to drying out of the adhesive component contained in the intermediate layer.

Accordingly, present claim 2 is not obvious to one of ordinary skill in the art based on the teachings of Oshio et al. and Iwasaki.

Similar comments apply to the rejections of claims 5 to 9, 14 and 15 over Oshio et al. in view of Iwasaki.

Claim 3

The above amended claim 3 differs from Obiya et al. (US 5,919,569) in that Obiya et al. fail to disclose or teach the non-photosensitive unbaked dielectric layer, and consequently, fail to disclose or teach a laminate comprising a removable support film, a photosensitive unbaked spacer material layer and the non-photosensitive unbaked dielectric layer. According to the present invention, an intermediate layer is provided within a laminate in order to solve the problem of residual spacer material present in the laminate, the laminate comprising the removable support film, the photosensitive unbaked spacer material layer and the non-photosensitive unbaked dielectric layer. Furthermore, the present invention achieves removal of the residual spacer material by providing the intermediate layer within the laminate.

However, Obiya et al. do not mention the problem of residual spacer material since Obiya et al. fail to disclose or teach the above mentioned laminate which tends to cause the problem.

Accordingly, claim 3 is not obvious from the combination of Obiya et al. with Oshio et al. and Iwasaki

In view of the above, amended claim 3 as well as claims 4, 11 to 13 and 16 to 18 are not obvious to one of ordinary skill in the art based on the teachings of Obiya et al., Oshio et al. and Iwasaki.

Claim 8

Concerning the rejection of claim 8, the above amendment to claim 8 has been made in view of the fact that Oshio et al. and Iwasaki fail to disclose or teach the non-photosensitive unbaked dielectric layer now recited in claim 8. Consequently, these citations fail to disclose or teach a method for forming on the surface of the substrate the non-photosensitive unbaked dielectric layer, the burnable intermediate layer and the photosensitive unbaked spacer material layer in this order.

Similar to the discussion in claim 3, the intermediate layer of the present invention is provided within the laminate in order to solve the problem of residual spacer material in the laminate, the laminate comprising the removable support film, the photosensitive unbaked spacer material layer and the non-photosensitive unbaked dielectric layer. Furthermore, the present invention achieves removal of the residual spacer material by providing the intermediate layer within the laminate.

However, Oshio et al. do not mention the problem of residual spacer material since Oshio et al. fail to disclose or teach the above mentioned laminate which tends to cause the problem. .

Accordingly, amended claim 8 is unobvious from the disclosure of Oshio et al. and Iwasaki.

Claim 10

The specific feature of the present claim 10 is that a photosensitive unbaked spacer material layer is located on the "non-photosensitive" unbaked dielectric layer having the intermediate layer therebetween.

In Oshio et al., the photosensitive unbaked spacer material layer is not transferred onto (i.e., not laminated on) a dielectric layer but onto a glass plate, a glass plate having electrodes formed thereon, and a ceramic plate (see paragraph [0048]). Further, Oshio et al. do not disclose or teach the dielectric layer as mentioned by the rejection.

In Hibino et al., the layer located on the dielectric layer is that of a protective layer consisting MgO (see paragraph [0099]) which is entirely different from the photosensitive unbaked spacer material layer of the present claim 10. Further, Hibino et al. do not disclose or teach that a photosensitive unbaked spacer material layer may be located on the dielectric layer.

Regarding Iwasaki, as discussed above in connection with claim 2, it is not reasonable to employ the intermediate layer of Iwasaki for the layer of the present claim 10.

In conclusion, as discussed above in connection with claim 8, the intermediate layer of the present invention is provided within the laminate in order to solve the problem of residual spacer material in the laminate, the laminate comprising the removable support film, the photosensitive unbaked spacer material layer and the non-photosensitive unbaked dielectric layer. Furthermore, the present invention achieves removal of the residual spacer material by providing the intermediate layer within the laminate.

However, none of the citations mentions the problem of residual spacer material since these citations fail to disclose or teach the above mentioned laminate which tends to cause the problem.

Accordingly, claim 10 is unobvious from the disclosure of Hibino et al., Oshio et al. and Iwasaki.

For the foregoing reasons, it is apparent that the rejections on prior art are untenable and should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned at the telephone number below.

Respectfully submitted,

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